Do-It-Yourself: Creating and Implementing a Periodic Table of the Elements Chemical Escape Room

Author: Malka Yayon, Shelley Rap, Vered Adler, Inbar Haimovich, Hagit Levy, and Ron Blonder

Year: 2020

Abstract

This year (2019) represents the 150th year since the discovery of the periodic table of the elements (PTOE). In honor of this important event, we designed a PTOE chemical escape room (called ChEsRm) that is suitable for middle and high school chemistry students. The main idea behind this ChEsRm is that it is relatively easy and inexpensive for teachers to build in order to introduce the activity into as many chemistry classrooms as possible. The puzzles of ChEsRm include interesting facts regarding the elements, their every day use, and their properties, as well as the subatomic particles. Some involve actual experiments and other nonlaboratory activities. Participants are asked to solve a mystery: finding the cause of a mysterious death. Although most escape rooms use locks and keys, in this case the mechanism used to reveal the solution is different and more flexible. Here we provide a detailed description of all the puzzles and explain how to operate the escape room in a school lab.

Key words: Collaborative/Cooperative Learning, Hands-On Learning/Manipulatives, Humor/Puzzles/Games, Problem Solving/Decision Making, Inquiry-Based/Discovery Learning, Student-Centered Learning, Periodicity/Periodic Table, Elementary/Middle School Science, High School/Introductory Chemistry

Referanse: Yayon, M., Rap, S., Adler, V., Haimovich, I., Levy, H., & Blonder, R. (2019). Do-It-Yourself: Creating and Implementing a Periodic Table of the Elements Chemical Escape Room. *Journal of Chemical Education*, *97*(1), 132-136. https://doi.org/10.1021/acs.jchemed.9b00660

Tag: kjemi, samarbeidslæring

Revision #2
Created 14 June 2023 15:22:42 by Admin

Updated 4 September 2023 12:20:02 by Kristin